

THERMALLY TREATABLE LAYER SYSTEM THAT FILTERS SUN AND HEAT AND METHOD FOR PRODUCING THE SAME

ABSTRACT OF THE DISCLOSURE

A layer system that filters sun and heat can be applied to glass by a vacuum coating process. The system comprises at least one series of metal layers in addition to a respective series of lower dielectric layers and a respective series of upper dielectric layers. At least one series of metal layers and one series of upper and lower dielectric layers are configured as a sandwich system, wherein one metal layer is encapsulated by an upper and a lower intermediate layer consisting of hypostoichiometrically nitrided or oxidized metal of the metal layer and sandwich systems of the series of layers contain individual sandwich layers of a stoichiometric and hypostoichiometric oxide or nitride of a metal or semiconductor. An oxygen or nitrogen deficit of the sandwich layers increases towards a neighboring sandwich system and the oxide and nitride layers are produced in a vacuum coating process.